AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q78133

Application No.: 10/698,438

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (previously presented): A partially crosslinked adhesive-supported on a porous film

for battery separator, consisting essentially of a porous film substrate having supported thereon

a partially crosslinked adhesive that is partially crosslinked by preparing a reactive polymer

having a functional group in the molecule and capable of being crosslinked upon reaction with a

polyfunctional compound having reactivity with the functional group and then reacting the

reactive polymer with a polyfunctional compound.

2. (previously presented): The partially crosslinked adhesive-supported on a porous

film as claimed in claim 1, wherein the partially crosslinked adhesive is partially crosslinked by

reacting a reactive polymer having an active hydrogen-containing functional group with a

polyfunctional isocyanate compound.

3. (withdrawn): The partially crosslinked adhesive-supported on a porous film as

claimed in claim 1, wherein the partially crosslinked adhesive is partially crosslinked by reacting

a reactive polymer having an active hydrogen-containing functional group with a polyfunctional

epoxy compound.

4. (previously presented): The partially crosslinked adhesive-supported on a porous

film as claimed in claim 2, wherein the active hydrogen-containing functional group is a

hydroxyl group, a carboxyl group, or an amino group.

2

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q78133

Application No.: 10/698,438

 (withdrawn): The partially crosslinked adhesive-supported on a porous film as claimed in claim 3, wherein the active hydrogen-containing functional group is a hydroxyl group, a carboxyl group, or an amino group.

- (previously presented): The partially crosslinked adhesive-supported on a porous film as claimed in claim 1, wherein the partially crosslinked adhesive has a gel fraction in the range of from 5 to 99%.
- (previously presented): The partially crosslinked adhesive-supported on a porous film as claimed in claim 1, wherein the partially crosslinked adhesive is supported on the porous film substrate at a supporting ratio in the range of from 5 to 95%.
- 8. (previously presented): The partially crosslinked adhesive-supported on a porous film as claimed in any one of claims 1 to 4, wherein the reactive polymer has a glass transition temperature of from -30°C to 100°C.
- (withdrawn): An electrode/porous film laminate comprising the partially crosslinked adhesive-supported on a porous film as claimed in any one of claims 1-7 and an electrode laminated thereon and contact bonded thereto.
- 10. (withdrawn): An electrode/porous film junction body, prepared by further crosslinking the partially crosslinked adhesive in the electrode/porous film laminate as claimed in claim 9 upon reaction of the unreacted functional group in the reactive polymer and the

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q78133 Application No.: 10/698.438

polyfunctional compound and bonding an electrode to the porous film.

11. (withdrawn): The electrode/porous film junction body as claimed in claim 10, wherein the porous film has an area heat shrinkage factor of 20% or less after heating at 150°C for one hour.

- 12. (withdrawn): A process of producing a battery, which comprises supporting a porous film substrate with a partially crosslinked adhesive that is partially crosslinked by preparing a reactive polymer having a functional group in the molecule and capable of being crosslinked upon reaction with a polyfunctional compound having reactivity with the functional group and then reacting the reactive polymer with a polyfunctional compound; laminating and contact bonding an electrode on the thus obtained partially crosslinked adhesive-supported on a porous film to form an electrode/porous film laminate; and after charging the electrode/porous film laminate into a battery container, pouring an electrolyte liquid containing the polyfunctional compound into the battery container and heating it to react the unreacted functional group in the reactive polymer with the polyfunctional compound, thereby further crosslinking the partially crosslinked adhesive supported on the porous film and bonding the electrode to the porous film to form an electrode/porous film junction body and obtain a battery having as a separator the porous film in the electrode/porous film junction body.
- 13. (withdrawn): A battery having as an electrode/separator junction body an electrode/porous film junction body having an electrode bonded to a porous film with an adhesive that is obtained by preparing a reactive polymer having a functional group in the molecule and capable of being crosslinked upon reaction with a polyfunctional compound.

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q78133

Application No.: 10/698,438

having reactivity with the functional group and then reacting the reactive polymer with a

polyfunctional compound.

14. (new): A battery comprising a negative electrode, a positive electrode, a battery

separator comprising a partially crosslinked adhesive-supported on a porous film consisting

essentially of a porous film substrate having supported thereon a partially crosslinked adhesive

that is partially crosslinked by preparing a reactive polymer having a functional group in the

molecule and capable of being crosslinked upon reaction with a polyfunctional compound

having reactivity with the functional group and then reacting the reactive polymer with a

polyfunctional compound.

15. (new): The battery as claimed in claim 14, wherein the partially crosslinked

adhesive is partially crosslinked by reacting a reactive polymer having an active hydrogen-

containing functional group with a polyfunctional isocyanate compound.

16. (new): The battery as claimed in claim 15, wherein the active hydrogen-containing

functional group is a hydroxyl group, a carboxyl group, or an amino group.

18. (new): The battery as claimed in claim 14, wherein the partially crosslinked

adhesive has a gel fraction in the range of from 5 to 99%.

19. (new): The battery as claimed in claim 14, wherein the partially crosslinked

adhesive is supported on the porous film substrate at a supporting ratio in the range of from 5

to 95%.

5

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q78133 Application No.: 10/698,438

20. (new): The battery as claimed in any one of claims 14, wherein the reactive polymer has a glass transition temperature of from -30°C to 100°C.